Energy, Environment and Technology Interim Committee
House Majority Caucus Room
August 8, 2005
9:30 a.m.
Minutes

The meeting was called to order at 9:30 by Cochairman Representative George Eskridge. Other committee members present were Cochairman Senator Brent Hill, Senator Patti Anne Lodge, Senator Tom Gannon, Senator Curt McKenzie, Senator Gerry Sweet, Senator Elliot Werk, Representative Maxine Bell, Representative Steve Smylie, Representative Joe Cannon, Representative Representative Bob Nonini, Representative Elaine Smith and Ad Hoc member Representative Bert Stevenson. Senator Clint Stennett was participated by phone for the second half of the meeting. Representative Ken Andrus was absent and excused. Staff members present were Mike Nugent and Toni Hobbs.

Others present at the meeting were Glen Pond and Carol Hunter, Utah Power; Ken Miller, Northwest Energy Coalition; Roald Doskeland and Mike Heckler, Windland, Inc.; John Watts, Veritas Advisors; Greg Panter, Idaho Power; Karl Tueller, Sara Weller, Brian Dickens and Karen Lewis, Office of Science and Technology; Rachel Hall, U.S. DOE Idaho/Office of Science and Technology; Molly Steckel, Sempra Energy; Representative Scott Bedke, District 27; Russ Hendricks, Farm Bureau; Maggie Colwell, Idaho Association of Counties; Ken Estep and Ray Zimmerman, Power County Commission; Valorie Watkins, Ken Rudeen and Ben Strand, Power County Development Authority; John Miller, Associated Press; Paul Laggis, Power County; Ken McClure, Givens Pursley/Sempra Energy; Sarah Bigger, Environmental Science and Public Policy Research Institute; Dick Rush, IACI; Bob Hoppie, Idaho Energy Division; Michael Boss, Boss Communications/ Southeast Idaho Energy; Pat Sullivan and Andrea Mihm, Sullivan and Reberger; Ramesh Raman, Southeast Idaho Energy; Neil Colwell, Avista Corp.; Brenda Tominaga, Idaho Irrigation Pumpers; Matt Yost, Idaho Rivers United and Rich Rayhill, Ridgeline Energy.

On a motion from Senator Hill and a second from Senator Lodge the minutes from the last meeting were approved unanimously.

Mr. Karl Tueller, Office of Science and Technology was the first speaker. His complete power point presentation will be available as an attachment to these minutes at: www.legislature.idaho.gov.

Mr. Tueller explained that the Office of Science and Technology was created by Governor Kempthorne in January 2004. The following people are members of the advisory council.

Governor's Science & Technology Advisory Council
Dr. Bill Shipp – chairman
Roger Madsen – director, Idaho Commerce & Labor
Megan Ronk – representative, Office of the Governor
Gary Stivers – executive director, State Board of Education
Admiral Archie Clemens (ret.) – president, Caribou Technologies
Mark Duncan – CTO, Micron Technologies
Dr. Richard Bowen – president, Idaho State University
Dr. Timothy White – president, University of Idaho
Dr. Robert Kustra– president, Boise State University
Tom Loutzenheiser – managing partner, Akers Capital
George Mulhern - senior V.P., Hewlett-Packard
Jim Schmit – president, Idaho operations, Quest
Jason Crawforth – found & president, Treetop Technologies
Dr. J. Kirk Sullivan - Veritas Advisors

The Office of Science and Technology is made up of the following employees.

Karl Tueller	– Deputy Director, Idaho Commerce & Labor
	– Executive Director, Office of Science & Technology
Karen Lewis	– Administrative Assistant
Julie Howard	– Science & Technology Specialist
Jeff Viano	– Science & Technology Specialist
Brian Dickens	– Science & Technology Specialist
Rachel Hall	– INL executive (on temporary loan to OST)
Sara Weller	– Intern

The Office of Science & Technology has a strategic plan that contains 26 action items with the following six strategies:

- Build, attract, and retain a highly skilled workforce
- R&D investment & university-industry collaboration
- Facilitate commercialization of technology
- Build an entrepreneurial culture
- Invest in tech-based economy infrastructure
- Establish Idaho's national/international image as a leader in hi-tech

Mr. Tueller said that one of the first things the Office of Science and Technology did was to hold industry forums that brought together technical people from the INL, private industry and the Idaho universities. These forums were designed to determine what expertise Idaho has with regard to technology. It was decided that Idaho had core competencies in power and energy, imaging, agriculture and bioscience and nanosciences and materials.

Mr. Tueller explained that the Office of Science and Technology advocates that education is a fundamental piece of the puzzle. The office is involved with University, College & K-12 Education Support as follows:

- Higher Education Research Council (HERC)
- Center for Advanced Energy Studies (CAES)

This is a new effort on the part of INL to build a significant facility that the state will be involved with.

- Governor's Industry Awards for Notable Teaching in Science (GIANTS)
- Project-based-education science program

Next steps:

- Statewide technology transfer office – University Research Foundation
- Matching Grant Program – increase federal funding through cost sharing

The Office of Science and Technology has also held the following events and workshops.

- **Kickstart**
  - -Three days of entrepreneurial events and workshops
  - -First annual event was held in Boise during April, 2005

, TechLaunch
-Entrepreneur/start-up business competition
-College 'commercialization' competition
-Second annual event was held in Sun Valley during July, 2005

Mr. Tueller stated that Idaho has a lot of entrepreneurial spirit. We are number one in the nation in patenting due in large part to Micron, Hewlett Packard and the INL.

, TechConnect - funded largely by INL
-Service & assistance to start-ups and entrepreneurs
-Regional offices in Idaho Falls, Nampa, Post Falls
-Developing statewide organization
-Next steps: expansion of services

It is hopeful that state funding will be forthcoming. Until that time a private nonprofit group has been formed to help bring federal funds to the project.

TechConnect is targeted at helping small entrepreneurial start-up technology related companies get off the ground.

Mr. Tueller said that the federal government is required, through a variety of programs to provide grants to businesses directly on research. Prior to this there has been a fragmented system in Idaho with regard to grants from the U.S. Department of Energy. This plan has been enhanced and the legislature approved a position for the Office of Science and Technology to focus on this area. This program is the SBIR/STTR Program and the program coordinator is Jeff Viano. Their goal is to provide over $2 billion annually in federal small-business R&D grants. (Phase I: 6 months, $100K; Phase II: 12 months, $1M) Nationwide: Idaho receives only ~ 0.15% of SBIR awards. The next step is individual grant development assistance.

Another program the Office of Science and Technology provides is the Venture Capital/Angel Support (program coordinator: Julie Howard). The goal here is to provide businesses with mechanisms to get venture capital money for projects. They support the Boise Angel Alliance, Highway 12 Ventures, etc. This group has participated int the following events & forums:

- Intermountain Venture Forum
- TechLaunch
- National Association of Seed & Venture Capital Fund conference
- Expansion of VC/Angel funding needed throughout Idaho
- Next steps: investment incentives and tax credits

Idaho's National Performance Measures as measured by the Milken Institute in 2004 is below. **Mr. Tueller** explained that the Milken Institute is a group that judges all the states in terms of where they are in terms of their science and technology effort. Idaho is:

- 1st in the nation for patents issued per capita
- 2nd for number of business incubators per capita
- 4th for percent of B.A. degrees granted in science & engineering
- 10th for industry R&D – dollars per capita

But Idaho is also:

- 47th in the nation in competitive National Science Foundation proposals funded
- 47th in SBIR Phase II awards per capita
- 50th in workforce intensity of engineers (excluding electrical engineers) per capita

U.S. Power & Energy at a glance…

- U.S. consumes roughly:
  - 40% of the world's oil
  - 23% of the world's natural gas
  - 23% of the world's coal

- About 56% of the oil used in the U.S. is imported
- U.S. hasn't built/licensed a new nuclear power plant in over 30 years
- Growth in renewable energy continues to be challenged by:
  - Little or no development of new hydroelectric sites
  - Decline in the use of biomass for non-electric purposes
  - High capital costs of most renewable energy production facilities

- World energy consumption is projected to increase 57% from 2002 to 2025

Mr. Tueller said that it is his understanding that the Energy Bill in Congress contains almost $2 billion for next generation nuclear power technology. In his opinion this will put the INL in Idaho as the international leader in what can happen in that area.

Idaho Power & Energy at a glance…

- INL designated as the nation's leading center of nuclear energy R&D
- Idaho ranks 13th in the nation for wind-power potential
- Geothermal energy has the greatest potential in the western U.S.
- Renewable biomass fuels in Idaho could generate enough electricity to supply 160% of the residential electricity used in Idaho (estimate)
- Hydropower is the leading renewable power, accounting for ~10% of U.S. electricity production
- Northwest's sunlight is enough to meet its entire annual power needs through solar power

Office of Science and Technology Power & Energy Activities

- Office of Science & Technology industry forums
- Partnerships with INL and universities
- Joint sponsorship and staffing of events and conferences
- Center for Advanced Energy Studies (CAES) support
- Developed a Power & Energy directory of Idaho businesses & institutions
- Support energy economic development

Mr. Tueller introduced Sara Weller, an intern from Albertson College of Idaho. She put together a collective report on all of the energy related companies in Idaho. These companies include:

- Backwoods Solar Electric Systems (Sandpoint)
- Berry Electric Inc. and Sun Spot Solar (Challis)
- Bitterroot Solar (Salmon)
- Idaho National Laboratory (Idaho Falls)
- Clearwater Power Company (Lewiston)
- CH2M Hill (Boise)
- Current Technologies (Placerville)
- Dynamic Fabricators, LLC (Rathdrum)

- East End Mutual Electric (Rupert)
- Fall River Rural Electric Coop, Inc. (Ashton)
- Four Moore Inc. (Moscow)
- Idaho County Solar (Grangeville)
- Integrative Energy, LLC (Burley)
- Koyle Hydro Incorporated (Gooding)
- Leisure Electric (Bayview)
- Magic Reservoir Hydroelectric Inc. (Richfield)
- Palouse Wind and Water (Viola)
- Sun Valley Solar (Ketchum)
- Washington Group International (Boise)

Mr. Tueller stated that he wanted the committee to be aware of the Office of Science and Technology and he offered the services of the advisory council in order to support the efforts of the Energy, Environment and Technology Interim Committee.

Representative Eskridge asked whether Idaho's community colleges can be incorporated into the process of science and technology. **Mr. Tueller** said they had visited with the community colleges and it is believed that the community colleges can partner with the universities in the state to receive grant money in order to increase courses offered in biosciences or other areas. The community colleges can also provide critical workforce training.

Mr. Michael Heckler, Director of Marketing and Development for Windland, Inc. was the next speaker. **Mr. Heckler's** powerpoint presentation will be available as an attachment to these minutes at www.legislature.idaho.gov.

He explained that his presentation involves Idaho Power's request for a "timeout" on wind powered PURPA projects. In his opinion the fundamental issue is what is the appropriate price for utilities to pay for wind power in Idaho.

Mr. Heckler said that the committee should be interested in this because of the tremendous support for renewable energy in during the last Legislative session and the petition relates to wind power.

The second reason is that depending on whether Idaho Power buys wind power at competitive market prices or at a price calculation based on the avoided cost rate

which uses natural gas prices, it could result in ratepayers paying an extra $100 million dollars.

Idaho Power's 2004 Integrated Resources Plan (IRP) called for acquiring 350MW of wind power with 200 MW of that being purchased by 2006-2007.

In June, Idaho Power issued a petition saying they were overwhelmed with PURPA applicants meaning they were getting too much power too soon and at too high a price. **Mr. Heckler** pointed out that while Idaho Power was being inundated with PURPA, they were also running an RFP to procure the wind in the Integrated Resource Plan. He explained that Idaho Power could procure this wind either through the RFP or through PURPA which is a federal mandate. Depending on how this comes down, they will buy the same product but the prices are dramatically different. The choices in the end will be buy the power at market price through the RFP or buy it under PURPA.

For backgound, on December 1, 2004, the PUC issued an order that raised the prices for PURPA power. They recalculated these prices due to the fact that natural gas prices had gone up and PURPA prices were increased. At that time there were eleven megawatts of wind PURPA that were either online or in construction in Idaho. On January 13, 2005, Idaho Power issued their RFP to buy the 200 megawatts of wind power that was in their integrated resource plan. On March 28, 2005, Idaho Power down selected the RFP bidders to a smaller group to engage in negotiations with. On June 17, 2005, Idaho Power filed a petition in front of the PUC that said they were being inundated with PURPAs.

During the period of time from December, 2004, when the price was raised until June 17,2005, 276 megawatts of additional wind PURPA applications had been brought to Idaho Power. They only wanted to get 200 megawatts. A few days later, Idaho Power also suspended the RFP.

Last Thursday the PUC issued an order saying that as of July 1, 2005, wind PURPAs over 100 megawatts cannot apply. They also said for anyone that had already applied could grandfather. **Mr. Heckler** said that Windland has filed a petition requesting reconsideration of the grandfathering issue partly because they had applied for the RFP.

Since the petition was filed on June 17, 2005, nine parties have intervened. There

has been a large submission of legal briefs, motions, testimony and hearings. It has been discovered that even though the price for energy is up dramatically from late 2003, wind power is still fully cost-effective and there is no future risk on a carbon tax. The PUC indicated in their order last Thursday that wind power is still an important addition to the resource portfolios of the utilities in Idaho.

Mr. Heckler said another thing that has come to light involves the reliability of wind or the way wind energy can be integrated into a generation portfolio. Testimony submitted based on nine separate studies, including a group of 60 utilities including Idaho Power, indicate that until the penetration level reaches about 450 to 600 megawatts of capacity in Idaho Power's generation system, integration of wind is not a significant issue.

Another issue is that fact that, according to **Mr. Heckler**, there is $30 to $160 million riding on the outcome of PURPA "grandfathering as the tables below indicate. He explained that the basic issue is that any wind generator does not run all the time, they generate a certain number of megawatt hours each year as shown in the first table.

Each MW of wind PURPA generator produces about 2,628 MW hrs/year	
Hours in one year	8,760 hrs
	x
Avg Production (capacity factor)	30%
	0
Annual Production for each MW	2,628 MW-hrs

Each wind PURPA MW hr is $6 - $11 above market price	
PURPA 2006 price/ MW hr	$61
Average price in Idaho Power RFP	$55

Top price in Puget Sound Energy RFP	$50
Range of PURPA overpayment	$6 - $11/ MW hr

Ratepayers exposed to $30 to $160 million overpayment	
Annual production per MW	2,628 MW hrs/year
20 year PURPA contract	x 20 years
Additional wind PURPA applicants subject to "grandfathering"	100 to 276 MW
Above market price range	$6 - $11 per MW hr
Ratepayer overcharge exposure	$31,536.000 (@ $6/MW hr and 100 MW) or $159,572,160 (@ $11/MW hr and 276 MW)

Mr. Heckler said that Windland views the issue as the wrong PURPA rate, not big wind vs small wind. The Hagerman (Fossil Gulch) PURPA project online pre-Order 29646, PURPA rates was built under the older rates proving that it is possible to build PURPA projects for less than $61 per hour rates.

He cautioned the need to make sure ratepayers are only charged reasonable prices for wind power. Idaho Power testified that if they were forced to buy all 200MW at Order 29646 PURPA rates ($61/MWh), it will cost ratepayers $5-6 million per year more than 200MW at the RFP rate ($51/MWh).

Windland promotes an equitable resolution short of grandfathering but if a PURPA applicant spent $12,000, don't overcharge ratepayers by more than $9 million.

Mr. Heckler explained that this inundation of Idaho Power from wind applications came after the PUC raised prices because natural gas prices increased. He

suggested encouraging Idaho Power to go forward with the RFP and procure as much power as they can. In that process a reasonable market price for wind generated electricity in Idaho will be established. Maybe that price can be used as in indicator for what prices should be for PURPA projects in the future, rather than natural gas prices.

In response to a question from **Senator Hill, Mr. Heckler** stated that the PUC suggested to Idaho Power that as of July 1, 2005, the capacity for a wind applicant be reduced to 100 KW or less. He said that this basically stopped all wind because 100 KW turbines cannot be purchased. For all applications that had been made before July 1, 2005, the PUC gave broad discretion on how to approach deciding whether to enter into one of those contracts. He recommended that perhaps Idaho Power should be encouraged to consider the interest of the rate payers in looking at every one of those applications very critically. He said that perhaps Idaho Power could find a clever way of reimbursing the individuals for their out of pocket expenses spent to submit the application short of signing a contract that causes the ratepayers to overpay by $9 to $15 million.

Senator Hill said that it was his understanding that the decision to halt things was temporary until something could be worked out. **Mr. Heckler** said that was correct. He said that the solution is eventually to get a PURPA price that makes sense. It is best for Idaho to develop the wind resources available at the right price. In his opinion running the RFP to get a measure of market price is a good indicator in the process of reestablishing PURPA rates.

Representative Smylie asked what role the state legislature would have in this outside of the PUC since PURPA is a federal program. **Mr. Heckler** said that it was his understanding that the structure of PURPA was established under federal statute in 1978 and regulations are also in federal statute. His recommendation was for more informal discussion with the utilities rather than legislation.

Representative Stevenson asked whether the legislation that was passed last year offering sales tax exemptions and tax incentives created the sudden influx of wind applications or whether it was the new PURPA rate. **Mr. Heckler** said it is primarily due to the rate. He added that the legislation was an important element in leveling the playing field between Idaho and other states in terms of sales and use taxes. That does play a small part in the sudden influx of applications.

Senator Gannon asked if there was also a federal tax credit offered for these projects. **Mr. Heckler** said that was correct. As long as a facility meets certain ownership requirements there are federal income tax credits just under 2 cents a kilowatt hour based on the number of kilowatt hours generated by the facility during its first 10 years of operation. Extending that production tax credit is one of the elements in the federal energy bill.

Senator Gannon said it was his impression that local investors are encouraged to participate due to the way PURPA is set up and because of the federal tax credits offered. **Mr. Heckler** said it is not likely to work this way because the tax law is arcane and the alternate minimum tax will make it so that most individuals cannot harness the production tax credit effectively. Typically on large transactions the production tax credit is sold to someone else who has the capacity to use it.

In response to another question from **Senator Gannon, Mr. Heckler** said that in most cases the relationships last longer than ten years and the local individual does not end up owning the towers. Originally PURPA was designed so that a small generator could negotiate with a large utility on more or less equal terms. The wind applications that Idaho Power has received involve capital expenditures that are in the $15 to $30 million range, it is not a local individual any more. The first eight that have been approved in Idaho are all one company.

Representative Eskridge said that he had heard that wind was becoming more competitive and asked for clarification of the kilowatt per hour cost for wind. **Mr. Heckler** explained that globally the demand for wind turbines is up 20% per year and the manufacturers of wind turbines are in a seller's market. Since GE took over Enron Wind in 2002, they have raised prices by almost 30% and everyone else has followed suit. This has driven up the price of wind generated electricity from 3.5 cents to about a 4.5 cent per kilowatt hour starting rate. The five cent figure that was discussed earlier is an average over the 20 year life of a project.

Representative Eskridge asked why natural gas is used as the avoided cost indicator for setting PURPA rates. **Mr. Heckler** said that traditionally the PUC has established one avoided cost rate for a variety of different types PURPA generation. Natural gas was the lowest cost energy until a few years ago. One of the findings in the order issued last Thursday is that it would probably be appropriate to have a different rate for an intermittent supplier such as wind.

Representative Eskridge said that from what he is hearing, the avoided cost issue should be readdressed given the new technology and resources coming on line. **Mr. Heckler** agreed with that and suggested that by completing the RFP a market price for wind would be established that could be used as one factor in recalculating the avoided cost rate for wind.

In response to another question from **Representative Eskridge, Mr. Heckler** explained that for a wind plant that is ten megawatts or smaller to get a reasonable rate of return they would need to get about 5.6 cents per kilowatt hour. This is what the Fossil Gulch plant signed a contract for.

Representative Cannon said that PURPA was initiated several years ago to get small entrepreneurs to develop unique ways of creating power. He said that perhaps it is short sighted to encourage inefficiencies and maybe it is time to revisit the ten megawatt requirement. Maybe that incentive should be removed in an effort to force the to become more efficient instead of the legislature trying to subsidize these plants to make them profitable. Let the marketplace make them profitable instead. **Mr. Heckler** said that, in his opinion, there is an opportunity to harness market forces. Idaho Power has a competitive RFP under way that can be used as a way for them to procure all of the wind generated electricity that they have decided they need. They just have to be tough on not overpaying for PURPA.

Representative Eskridge commented that PURPA was originally designed to bring more diversified resources in to the resource mix at a cost effective rate. That is the reason for the avoided cost concept. It was not designed to give an undue advantage to a renewable resource that would cause a rate impact that would hurt rate payers. In his opinion this needs to be looked at.

Mr. Ramesh Raman, Southeast Idaho Energy, LLC., was the next speaker. He said his company is a private developer of power plants. He noted that under the new energy bill, PURPA is being revoked and will be grandfathered for existing contracts.

Mr. Raman explained that Southeast Idaho Energy is developing a clean coal project at the old FMC site in Power County. The Clean Coal Gasification (or CCG 500) is a project that will bring the latest technology in fossil fuel based generation to the West with emissions on the order of a natural gas plant, the

CCG500 will, in addition to producing electricity the plant will:

- co-produce low-cost feedstock materials for the fertilizer industry here in Idaho;
- provide construction grade aggregate for the upper Snake River Plain, and;
- provide good paying jobs during construction and upon operation.

He explained that the coal is not burned, it is oxidized in the pressurized chamber with equal parts oxygen and coal. The result is a synthetic gas that allows the company to clean the gas prior to emission. They can strip out the sulfur, capture mercury in a carbon bed, capture part of the carbon dioxide (C_o2) prior to combustion (most of it still goes through the combustion process). The key component of this is the sulfur and C_o2 capture. Emissions are captured prior to combustion.

Capturing emissions out of the stack is much more challenging. The reason this new technology has not been used in the past is because of cost. It is currently about 20% higher than a traditional polarized coal plant. With the energy bill incentives, it will be close to the same cost. **Mr. Raman** said this is a technology breakthrough. There have not been a lot of vendors in the past willing to provide a total package facility although the process is commercially proven.

Senator Werk asked about the term "clean coal" and removing emissions. **Mr. Raman** said coal is still a fossil fuel. He explained that there are still stack emissions from this process but that these emissions are similar to what a natural gas facility would emit. **Senator Werk** asked about other impacts that result from this process. **Mr. Raman** said "clean coal" means cleaner coal or a cleaner fossil fuel. There are C_o2 emissions, Nitrogen Oxides (NO_x) emissions, trace Sulfur Dioxide (S_o2) and volatile organic compounds (VOC) but the emissions profile is very similar to a natural gas plant. This is different compared to a traditional coal plant in that the volume of S_o2, mercury, C_o2 and NO_X emissions are much lower from the stack. In order to keep it from being emitted sulfur is captured and made into elemental molten form so it can be sold. An activated carbon bed captures the nitrate and the carbon charcoal is replaced and sent to a hazardous waste landfill. NO_x is limited because diluted nitrogen into the gas turbine that minimizes the NoX that is formed. C_o2 can be captured prior to combustion.

Representative Smylie asked where this process gets its coal compared to the

pulverized coal process. **Mr. Raman** said there are several competing methods for processing coal. In his opinion the process his company uses, known as Gasification Combined Cycle, (IGCC) is more environmentally friendly. It is also more sensitive to the type of coal this is used. Pulverized coal can use lower grade coal that is less expensive. The coal his company plans to use will come from Utah and Colorado.

Senator Sweet asked if the subsidies in the energy bill allow the IGCC process to be more competitive with pulverized coal. **Mr. Raman** said yes. He explained that there is an investment tax credit of 20% as well as a pool of available federal loan guarantees. These have strict efficiency requirements and emission requirements to qualify. In response to another question from **Senator Sweet, Mr. Raman** said it is not entirely clear that IGCC processes need incentives to be competitive. It depends on technology and once that is standardized the cost will come down. If a carbon tax is implemented, the environmental cost of this process will also be lower that pulverized coal.

Representative Smith said that it was her understanding the company was not going to use Utah coal. **Mr. Raman** said that was incorrect. The mine they are looking at has four million tons available per year for the life of the project. He explained that the resource in Utah is not as significant as that in Wyoming but Wyoming has a lot of coal his process cannot use.

Mr. Raman moved on to discuss power plant siting legislation from the perspective of what brought SIE to Power County:

, Need for Generation

Mr. Raman said that SIE is siting in this location because Idaho Power in their IRP had a need for additional base load resources but so does PacifiCorp. This location allows his company to tie into both. More importantly, the resources required by the western region are quite daunting. If California needs more power tomorrow, Idaho will be impacted. Being able to sell this power to an Idaho utility will help isolate Idaho from that impact.

, Transmission Access
, Rail Access
, Water

, Educated Work Force (INL/ISU) A site well suited for this type of project

These are the basic elements that drive the siting of thermal power generation, and these elements exist in Power County. He said that siting a power plant for SIE is not a small undertaking.

The other major consideration in siting a generating station is compliance with rigorous county, state and federal environmental and land use permitting requirements:

, Zoning
, Clean Air Act
, (Federal Land Manager Oversight)
, Clean Water Act
, RCRA
, Endangered Species Act

The following is a longer list of the approvals SIE must go through.

, Power County Planning and Zoning
, Power County Commission
, Idaho Department of Environmental Quality
, Idaho Water Resources Board
, Idaho Public Utilities Commission
, Idaho Fish and Game
, Environmental Protection Agency
, Federal Energy Regulatory Commission
, US Department of Interior
, US Department of Agriculture
, US Department of Transportation
, US Department of Energy

During each phase of development and review, countless public hearings will be held to assess, analyze, discuss, and dispute the findings and conclusions of the studies, reports and models each of the various agencies and associated statutes will require.

Mr. Raman said that the State of Idaho has a responsibility to its citizens to ensure

the availability of cost-effective, environmentally responsible, reliable power. It is not only a commodity of convenience, it is basic to health, safety and national security. He added that all of the new advances, wind, biomass, geothermal and coal are tremendous resources to have available. He said that the U. S. holds 25% of the world's coal supply and in his opinion it becomes a national security issue as well. The question SIE asked is how to use coal in a more acceptable manner.

This responsibility resides with the Idaho Public Utilities Commission and the Idaho Department of Environmental Quality.

Mr. Raman voiced a concern of how a siting council will benefit the overall process of a project. The regulations and rules his company is subject to today are very deep and very broad. This is appropriate given the types of projects involved. He said he is not sure if the intent of the legislation is to expand or add another layer of regulations and if so, what does that achieve.

His company has spent a fair amount of time and continues to do so explaining the technology and emissions profile of the project to the constituency in the surrounding areas of Power County, Bannock County and Fort Hall. It is their plan to have an open and transparent dialogue throughout the process. **Mr. Raman** said he is not sure that a siting council process will change anything from what exists today.

Representative Smylie said that there are several proposals in Idaho for coal fired plants. He said he was aware that the Sempra plant that is proposed in Jerome County will use pulverized coal and will be similar in size to the SIE plant. He asked if Idaho is looking at an either/or situation or is it possible that both plants could move forward. **Mr. Raman** stated that both companies, in his opinion, are going after the same clients; Idaho Power and PacifiCorp and utilities in the Pacific Northwest. There is a proposition that a transmission line will be built to go down to Nevada. If that occurs and SIE has the opportunity to sell power there, they would do so. The purpose of SIE siting in Idaho is to sell to Idaho Power and PacifiCorp.

Representative Smylie asked whether the price SIE will sell the power for be higher because the technology is more expensive and uses a more expensive grade of coal. **Mr. Raman** said that the capital cost may be higher but the production costs or cost of energy needs to be the same as others in order to be competitive.

Beyond that it is a matter of financial engineering and how the financing is structured. The capital cost is higher but with the investment tax credit, the project gets to parity with other plants.

Senator Werk asked how Idaho's plant siting process today compares with other states. **Mr. Raman** said there is no easy way to site a power plant. The current time line is 2.5 years. He said he is not opposed to siting legislation, it is the redundancy of the process that he is concerned about. Most of the agencies involved in siting currently such as DEQ have oversight by other federal agencies. He asked if a siting council would strip away the ability for local communities to have a planning and zoning authority. It is not particularly easier to site a plant in Idaho than it is in a state with a siting authority. In his opinion a siting council could slow a project down and add to the cost. He added that the requirement in the siting legislation to use a consultant could raise the cost of his project substantially and that any company will try to pass on to the rate payer.

Senator Sweet asked if there have been problems identified with the current system that would necessitate siting legislation in Idaho. **Mr. Raman** said he was not aware of anything. He added that even though a number of projects have been proposed at once, it is unlikely that all of them will be developed. Developing a project such as the SIE or Sempra project is a huge undertaking and it cannot be done until there is someone in place to buy the production.

Representative Smith asked for clarification of whether either SIE or Sempra has a contract signed for their production. **Mr. Raman** said that his company SIE has not yet signed a contract.

Senator Werk asked whether there are any examples where people outside or downwind of projects have been excluded from testifying regarding siting of plants or even dairies. **Mr. Raman** said he is not aware of any exclusionary issues. They did have opposition to a project in Pennsylvania and they suggested that all counties that could possibly be impacted by the plant be invited to testify. He said that DEQ is not necessarily required to be that inclusive. DEQ looks at the region as a whole when considering the impact of downstream air quality but they are not required to hold public meetings outside of the county in which the plant will be located.

Mr. Ken Estep, Power County Commissioner, testified that they have never

controlled any testimony other than setting time limits. He stated that in their opinion a siting council would be a duplication of local planning and zoning efforts. **Mr. Ken Rudeen, Power County Development Authority,** agreed with **Mr. Estep.** He said that if siting legislation is developed, it needs to include all types of energy including dams, wind and so on.

Mr. Greg Abel, President of MidAmerican Energy Holding Company was the next speaker. His company is in the process of purchasing PacifiCorp from Scottish Power.

He explained that MidAmerican Energy is a global energy company with operations in the United States, the United Kingdom, the Philippines and Australia. They are 81% owned by Berkshire Hathaway and Mr. Warren Buffett. Associated with that structure they basically have six businesses that are operated very independently from one another. It is intended to add PacifiCorp as an additional business. MidAmerican Energy has approximately $20 million in assets, $6.6 billion in revenues. The businesses include a large U.S. utility in Des Moines, Iowa that services approximately 1.4 million gas and electric customers. This is similar to the 1.3 million electric customers that PacifiCorp currently serves. The utility in the Midwest is integrated meaning they also own and operate the transmission and distribution and a large part of generation. MidAmerican also owns a utility in the United Kingdom, a large natural gas pipeline in Omaha and the Kern River pipeline that serves Wyoming, Utah, Nevada and California. MidAmerican also owns a plant that primarily was based around renewables, 14 geothermal facilities in the United States, three geothermal facilities and one large hydro facility in the Philippines. The only non-energy business they own is a home brokerage, real estate business that owns certain real estate companies. It was acquired when it was thought that deregulation was going to occur throughout the United States.

Mr. Abel said that MidAmerican operates in a similar fashion to PacifiCorp with a strong focus on customer services and a commitment to the environment and renewables.

He explained that PacifiCorp's current owner, Scottish Power, has decided to exit doing business in the United States and that the capital requirements around the current investment strategy of approximately $1 billion per year for PacifiCorp are too great. This will be for five to ten years and Scottish Power decided they

wanted to deploy their capital primarily back in the United Kingdom.

Mr. Abel said that MidAmerican operates in a fashion similar to PacifiCorp with a strong focus on customer service and a commitment to the environment and renewables. Other priorities for the company include employee safety, legislative and regulatory integrity and expecting a fair rate of return for the risk.

Following is a list of specific commitments that MidAmerican has made regarding PacifiCorp.

, Investment of $8 million over the coming ten years in the existing ore fleet that PacifiCorp has. Effectively 85% of the megawatts they generate come from coal. MidAmerican believes that getting ahead of what is required on overall emissions is critical. They are proposing a plan that will allow a reduction of overall emission rates by about 40% to 50%. This will involve installing pollution controls at PacifiCorp plants in Utah, Wyoming and Arizona to reduce emissions of sulfur dioxide, nitrogen oxides and other pollutants.

, A proposal in each of the states to implement a demand site management and efficiency program up to $1 million to be funded by the shareholders to figure out how to better utilize and manage the resources in the six states.

, Strengthening power delivery infrastructure in all six states, including development of transmission lines in Utah, Idaho and Washington to improve the flow of electricity from generation sources to customers and to enhance opportunities for development of renewable energy. Upgrading the transmission system will allow them to create optionality and make sure the proper decisions are made for what long-term generation needs to be in place. Without proper transmission plants are often built in very specific locations to support load.

, An $88 million project in Walla Walla, Washington focused on removing constraints allowing the company to properly utilize renewable resources in the portfolio

, $140 million program that is a variety of small specific projects across the states that should deliver immediate service improvements to the customers.

, Pursuing 100 megawatts of new wind generation within a year of closing the transaction and an additional 400 megawatts of new renewable resources after the completion of needed transmission facilities.

, Lowering corporate and financing costs by $36 million in aggregate over a five year period, thereby delivering a direct economic benefit to customers. Subsidiaries get to benefit from the fact that Berkshire Hathoway is one of the only triple A rated companies in the United States. This allows them to borrow debt at a lower cost which is a benefit back to the customers.

Mr. Abel explained that the transaction to purchase PacifiCorp was announced in May and they have been in active dialogue with the interested parties prior to making the state filing in July. That dialogue is continuing so they are aware of what the priorities should be. He said MidAmerican is very focused on trying to bring the transaction to closure and is seeking the various state approvals by the end of February, 2006 so the transaction can be completed by March, 2006.

Representative Bell asked if they are going to spend $812 million to take care of emissions, what is being done currently to meet the requirements of the Clean Air Act. **Mr. Abel** explained that what they are proposing is not currently required under existing law but they think that it will be in the next ten years. Since this will be implemented over time, they plan to do the upgrades as the plants are taken down. They want to make sure that when a facility is taken down, the environmental technology is put in to alleviate the need to take it down again. The other question is what is the cost of not improving the technology. MidAmerican prefers to control their destiny.

Senator Hill asked if the processes for siting transmission is sufficient. **Mr. Abel** said that they get more complaints for transmission lines than they do for huge power plants, including coal.

He stated that the key is to have one part of the process that adjudicates the issue with appeal, make sure the rules are properly defined. In Iowa the PUC rules both on the siting of the generation facility and ultimately on the transmission. The rules are very specific and separate environmental permits are required.

Representative Eskridge asked from a ratepayers perspective, due to the size of

MidAmerican's holdings, whether they have the opportunity in the future to control the market such as what happened with Enron. **Mr. Abel** said that the energy bill does change what entities can acquire utility companies. The energy bill consolidates the power to approve these purchases in FERC. One of the specific things FERC has expanded authority on is the control of generation. This is because generation is ultimately where the markets can be manipulated.

Representative Eskridge asked how RTOs or GridWest fits into MidAmerican's plans for transmission in terms of risk or control by another entity. **Mr. Abel** said that in the Midwest, MidAmerican is the only company that has not joined the RTO because they are not comfortable transferring their assets. They felt the risk was too great and that the cost was too high. There has been a lot of pressure from FERC to join but they have not done so. As a compromise, MidAmerican has someone who reviews their transactions daily and on an annual basis to make sure they are complying with federal law. In the West, there is a lot of dialogue about transferring assets and the proper operating costs. MidAmerican is participating in that dialogue but there will have to be the proper balance. It has to be demonstrated that whoever takes over can operate the assets efficiently and at the proper cost.

Representative Eskridge said that MidAmerican is proposing a transmission project from Idaho into Utah and a Walla Walla project, Northern Lights is proposing to build transmission from Alberta, Canada through Montana into Idaho and into the California market. He said that if these projects are done correctly with a joint planning process, everyone could benefit. **Mr. Abel** agreed that cooperation was important and they plan to be a part of that.

In response to a question from **Representative Stevenson, Mr. Abel** said that in his opinion the concept of GridWest is on the right track. It comes back to the cost challenge and the risks.

Ms. Maggie Colwell, Idaho Association of Counties (IAC) was introduced to comment on the proposed Energy Facility Siting legislation. She explained that IAC has not taken a formal position on the draft legislation.

Ms. Colwell stated that IAC feels that local siting processes do have the necessary procedural safeguards in place between the hearings held by the planning and zoning commissions, the appeals process to the county commissioners and those

hearings and the fact that all decisions are subject to judicial review by the courts as appropriate. If there is a problem, in their opinion it is from opposition groups because it is impossible to get 100% agreement or approval of decisions. The hope is the problem is not with the procedure but with the decisions. She stated she is not aware of any instance in Idaho where anyone was limited in their testimony except for a time limit.

Ms. Colwell presented the following questions regarding the siting legislation.

, Shouldn't county government have a permanent seat at the table rather than just when a specific application is being considered? The Council, under this draft, is given considerable power and authority, including the authority to promulgate rules and issue "guidelines" that impact local government without their ability to participate on a permanent basis.

If legislation moves forward IAC's first recommendation would be to grant them a permanent position on the council in order to be able to participate in the rule making and guidelines that are drafted.

, IAC has a standing policy to support the development of alternate energy sources within the state of Idaho, especially those that can also help us with other environmental and societal issues, such as anaerobic digesters. They are concerned that this legislation and the additional cost it brings to developers might be enough to prevent development in the state. The margin of error between success financially is very small already.

Ms. Colwell noted that past legislation offering tax credits and incentives to alternative energy projects seems to go against adding another layer of cost with a siting authority.

Ms. Colwell suggested that if the committee disagrees with IAC's approach to energy siting, it develop a group similar to the CAFO Site Advisory Team. This was put together by the state a number of years ago and includes the Idaho Department of Water Resources, the Department of Environmental Quality and the Idaho Department of Agriculture who, at the county commissioner's request, review applications for CAFOs, give technical assistance and advice and in the end, make a recommendation on whether or not it should be approved given the specific location. This team has been incredibly helpful and has vastly improved

the ability of local government make appropriate decisions for its citizens and it has also improved the relationship between state agencies and county government. Counties recognize that they need assistance and guidance in making these difficult siting decisions and welcome any resources the state can provide but IAC is unsure they can support this legislation without substantial revisions.

Senator Hill asked how the CAFO Site Advisory Team was created. **Ms. Colwell** said that was created statutorily about four years ago. Statutorily the commissioners make the request of the Department of Agriculture who calls together DEQ and Idaho Department of Water Resources and they review the application presented to the county. They look at the location of the CAFO and whether it is appropriate for that location given air quality, water quality and animals already in the area. Then they make a general recommendation on a sliding scale regarding appropriateness.

Senator Werk said that in his opinion, the siting of power plants is much broader than just a county issue due to how certain projects affect an entire region. That, as he understands this, is why siting legislation is being considered. **Ms. Colwell** said that IAC does not disagree with that and that they have supported increasing the radius for testimony with regard to CAFOs which is similar to power plant siting. It is not uncommon in other states to require hearings in all counties within a certain distance from the proposed project. In her opinion, IAC is supportive of increasing the public hearing process especially if the comments are substantive and helpful to the commissioners and testimony relates to those people truly impacted. This current draft legislation does not necessarily achieve this.

In response to a question from **Senator Werk , Ms. Colwell** said that local citizens could feel that their opinions are diluted at the state level by people many miles away making siting decisions. A balance needs to be met that includes everyone but does not remove it so far from the impacted area that those people have not control.

Senator Hill clarified that the process being discussed just involves the county commissioners. Approval still needs to be received from DEQ, BLM and the PUC. He said that all of those agencies hold public hearings as well and in his opinion, they would be completely oblivious to county lines. **Ms. Colwell** said that was true and that there are specific requirements to hold more hearings under certain circumstances. Each process is directed towards a certain group and the process

seems to get relatively good coverage. She said she is not sure there is a hole that needs to be filled with a state siting council.

Mr. Raman said that with respect to impacted areas, state agencies look at areas without boundaries and the hearings are based on impacts within certain zones. It is not county or township specific.

Mr. Ken Rudeen, Power County Development Authority explained that FMC is remediating their property and turning it over to a nonprofit development authority, making them landlords to potential power projects and other developments on that property. The plant is located in the corner of Power County and may affect Bannock County more than Power County. The property tax benefits may fall into Power County but most of the income stream falls into Bannock County.

He said he is leery of the siting legislation because it gives veto power to large counties and leaves small counties without a leg to stand on. He said that enacting siting legislation for thermal plants will lead to siting legislation for wind turbines, hydro electric plants and nuclear facilities. This will lead to a gamut of controversies that could go on for many years.

Mr. Rudeen asked if when a site is proposed on a state line, does the town in the other state that is impacted also get a seat on the council. Who decides who gets included and how does it get narrowed down. In Idaho there are also tribal interests to consider.

Senator Werk asked if the local boards have the expertise to truly evaluate these issues in siting power plants. **Mr. Rudine** said no but they rely on a lot of input from other experts to get as much information as possible. In his opinion the fear factor is a big issue in siting of power plants and that public education is very important. Local governments are very responsible and do their best to get the best information as possible.

Mr. Ken Estep, Power County Commissioner agreed that education of the public is very important in alleviating much of the fear associated with these issues. The Power County Commissioners did a lot of research before moving forward with this project. Power County is not trying to do anything to hurt Bannock County.

Representative Eskridge asked what impact these counties are going to see on schools and services especially if the plant is located on one county but most of the employees live in the other. **Mr. Estep** said that this was discussed with Pocatello Mayor Chase and because of the share of property taxes the legislature pays for schools, it pretty well balances out. He added that Power County is also impacted by decisions made in Bannock County.

Mr. Rich Rayhill, Ridgeline Energy explained that currently the siting process starts with planning and zoning commission. When that is done all parties have the opportunity to appeal to the county commissioners for a second layer of review. Once that is complete there is the opportunity to take the decision of the county commissioners to court. There is ample opportunity to have decisions reviewed.

He also pointed out that all of the comprehensive plans that he has dealt with in the state include language that says that all projects approved in the county must comply with all state and federal regulations and laws.

Representative Eskridge asked committee members for their comments and suggestions regarding the siting legislation draft. A copy of this draft will be available as an attachment to these minutes at: www.legislature.idaho.gov.

Representative Stevenson said that after reviewing the legislation he questioned whether the legislation was intended to stop certain facilities from being built or is it intended to try to bring industry to the state. In his opinion the legislation seems to include many hurdles that would make it almost impossible for some industries. It would seem to him the legislation is intended to stop certain projects.

Representative Stevenson said that the Jerome County Commissioners, where the Sempra plant is proposed, have scheduled meetings with DEQ and other agencies to bring the members of the zoning commission up to speed with all of the regulations required for approval. In his opinion the financial burden added by this legislation is enough to stop development.

Representative Eskridge noted that this is not just a question of the draft legislation but a question of generation and transmission siting in general and whether the state needs to do anything.

Senator Stennett explained that these proposed facilities are very large could change the quality of life in Idaho forever. In his opinion those people not living in the county that makes the final decision deserve to have the economic impacts examined by a nonpartisan, non-affected board. The issues are broader than recognizing traditional county lines as far as siting goes. He said that this legislation attempts to create a broader group of people that feel they would be impacted to have seat at the table to determine what the impacts would be and have a say in the ultimate decision.

Senator Sweet asked what the specific problem actually is. There has been a lot of discussion about the impact on the people but what about the impact on state growth and the fact that we cannot meet the demand for power. What will be the impact of that on the people that live here? Without sufficient power for industry and new factories, how does the state create jobs? In his opinion the state needs power that can be generated in the short term. The review process already seems to include local, state and federal agencies as well as the courts and this legislation seems to be an additional layer of bureaucracy and cost that will be passed on to the rate payers.

Representative Smylie commented that the legislation last session was successful in dealing with transmission and offering incentives for alternative energy to encourage development of projects in Idaho. He would not want to develop legislation that would now cause people to not want to build projects here. **Representative Smylie** said he could only support legislation that streamlines the siting process, not slows it down. He added that surrounding states do not have siting legislation. He cautioned siting legislation in Idaho that would cause projects to be built in other states.

Senator Gannon said he appreciates the intent of the legislation to protect county interests but where should the line be drawn as to who is actually affected. For example, depending on how the wind blows, Buhl is downwind of Boise. Maybe Buhl should have a say regarding traffic decisions in Boise. Things could get out of hand quickly.

Senator Gannon said that from remarks being made by committee members, everyone seems to be fairly satisfied with the situation as it exists and perhaps there is not any need for the legislation.

Senator Werk suggested having a presentation on exactly what the siting process is today. He said it would also be helpful to have information on how surrounding states handle siting. Before he could make a decision on this legislation, he would like to get that information. **Representative Eskridge** agreed that he would like to have such a presentation and that since **Senator Stennett** is only participating by phone a decision to scrap the legislation should be postponed.

Representative Nonini said that he would like the issue of transmission to be included in a future meeting. **Representative Eskridge** said that in his opinion generation and transmission are separate issues because transmission transcends multiple jurisdictions. He also stated that transmission, depending on how the siting works, could be used as a veto for a particular project in one county that another county does not care for.

Senator Hill suggested that all entities that have anything to do with siting issues be present at the next meeting and be ready to testify on just siting issues. He said he would like them to inform the committee what works well and what does not so that a decision can be made as to whether to move forward with legislation. He said he would also like other entities to be given the chance to respond and testify as to how they think the process is working. These entities should include power companies, wind developers and others that deal with this every day.

Representative Eskridge said that he would like to have representatives from DEQ, Idaho Department of Water Resources, FERC and the PUC make presentations at the next meeting.

Representative Stevenson asked that since both of the proposed coal plants are merchant plants, FERC has some authority over them as do other federal agencies. In his opinion it is important for the committee to know who has the ultimate authority over what type of plants.

Representative Smith said she would like information regarding how surrounding states handle siting. **Senator Lodge** said that she would like that information to include states from other parts of the country besides just the West.
Representative Bell suggested sending that out to the committee ahead of time for them to review.

Senator Werk suggested having one person present the siting process information

instead of having each separate agency do a presentation. **Mr. Nugent** said that the committee is authorized to use the services of Mr. Don Reading as a consultant. He should be able to make such a presentation.

Representative Smylie said that he would also like to hear from more people actually going through the process, such as **Mr. Raman,** what is actually involved for them to get siting approved. **Representative Eskridge** said that in his opinion using a consultant for such a presentation would be more impartial.

The next meeting was scheduled for October 5 and this meeting was adjourned at 2:05 p.m.